DOCUMENT RESUME

ED 161 010 CS 004 444

TITLE Reading, Comprehension, and Memory Processes: Abstracts of Doctoral Dissertations Published in "Dissertation Abstracts International," July through September 1978 (Vol. 39 Nos. 1 through 3).

INSTITUTION ERIC Clearinghouse on Reading and Communication Skills, Urbana, Ill.

PUB DATE 78

NOTE 11p.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.

DESCRIPTORS Adolescents; *Advance Organizers; *Annotated Bibliographies; Behavioral Objectives; College Students; Culture; *Doctoral Theses; Elementary Secondary Education; Higher Education; Imagery; Information Processing; Learning Disabilities; Memory; Reading Achievement; *Reading Comprehension; Reading Materials; Reading Processes; *Reading Research; Recall (Psychological); Retention; Speech Communication; *Thought Processes; Word Recognition

IDENTIFIERS Anaphora; Inference

ABSTRACT

This collection of abstracts is part of a continuing series providing information on recent doctoral dissertations. The 12 titles deal with the following topics: advance organizers; a comparison of the effectiveness and efficiency of behavioral objectives and sample tests; anaphoric nominal substitution and its relationship to reading comprehension among college students; the effects of inferential processing induced by inserted questions on prose recall; the effect of method of presentation and degree of imagery on learning responses to printed words; direction and organization and adolescent learning disabled students' reading comprehension; the effects of reading ability and material difficulty on students' abilities to recognize words in isolation and in context; a comparison of memory for verbatim and inferential information in prose at two grade levels; the role of cultural schemata in narrative comprehension; the effect of oral versus written presentation of an advance organizer on retention; a comparison of the effects of questions and of advance organizers on comprehension and retention of prose materials; integrating information from text; and memory for prose: a processing activities approach. (FL)

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Abstracts of the following dissertations are included in this collection:

Derr, Kenneth Thomas
ADVANCE ORGANIZERS: A COMPARISON OF THE EFFECTIVENESS AND EFFICIENCY OF BEHAVIORAL OBJECTIVES AND SAMPLE TESTS

Dutka, Julia Yuen-Heung To
ANAPHORIC NOMINAL SUBSTITUTION AND ITS RELATIONSHIP TO READING COMPREHENSION AMONG COLLEGE STUDENTS

Friedman, Frank H.
THE EFFECTS OF INFERENTIAL PROCESSING INDUCED BY INSERTED QUESTIONS ON PROSE RECALL

Johnston, Joan Bascle
THE EFFECT OF METHOD OF PRESENTATION AND DEGREE OF IMAGERY ON LEARNING RESPONSES TO PRINTED WORDS

Lindsey, Jimmy Doyle
DIRECTION AND ORGANIZATION AND ADOLESCENT LEARNING DISABLED STUDENTS' READING COMPREHENSION

Negin, Gary Alan
THE EFFECTS OF READING ABILITY AND MATERIAL DIFFICULTY ON STUDENTS' ABILITIES TO RECOGNIZE WORDS IN ISOLATION AND IN CONTEXT

Pérez, Ray Stephen
A COMPARISON OF MEMORY FOR VERBATIM AND INFERENTIAL INFORMATION IN PROSE AT TWO GRADE LEVELS

Rice, Grace Elizabeth
THE ROLE OF CULTURAL SCHEMATA IN NARRATIVE COMPREHENSION

Salmon, Robert Dreifus
THE EFFECT OF ORAL VERSUS WRITTEN PRESENTATION OF AN ADVANCE ORGANIZER ON RETENTION

Sylves, David P.
A COMPARISON OF THE EFFECTS OF QUESTIONS AND OF ADVANCE ORGANIZERS ON COMPREHENSION AND RETENTION OF PROSE MATERIALS

Walker, Carol Hinton
INTEGRATING INFORMATION FROM TEXT

Zimmer, John William
MEMORY FOR PROSE: A PROCESSING ACTIVITIES APPROACH

ADVANCE ORGANIZERS: A COMPARISON OF THE EFFECTIVENESS AND EFFICIENCY OF BEHAVIORAL OBJECTIVES AND SAMPLE TESTS Order No. 7816189

DERR, Kenneth Thomas, Ed.D. Brigham Young University, 1978. 75pp. Chairman: R. Irwin Goodman

Fifty-seven students in two undergraduate mathematics education classes were randomly assigned to one of four treatment groups to investigate the comparative effectiveness and efficiency of sample tests and behavioral objectives as advance organizers to instruction. Treatment 1 students were given behavioral objectives followed by instruction. Treatment 2 students were given sample tests followed by instruction. Sample 3 students were just given instruction and treatment 4 students were given both behavioral objectives and instruction. All students were given a posttest and the time on instruction and tests were recorded.

Two way analysis of variance tests indicated that students who had either behavioral objectives or sample tests did better on posttests than students who had no organizers ($p<.05$). Comparison of cell means indicated that sample exams were more effective organizers than objectives.

ANAPHORIC NOMINAL SUBSTITUTION AND ITS RELATIONSHIP TO READING COMPREHENSION AMONG COLLEGE STUDENTS Order No. 7810875

DUTKA, Julia Yuen-Heung To, Ed.D. Columbia University Teachers College, 1978. 187pp. Sponsor: Professor Robert L. Allen

Research has demonstrated that when people read, they call on what they know about the language in ways which we do not yet fully understand. The purpose of the present study was to examine the relationship between anaphoric nominal substitution and reading comprehension. Specifically, two theoretical questions were formulated: 1. Is there a relationship between readers' ability to reproduce constructions which are replaced by anaphoric nominal substitutes in discourse and the readers' reading comprehension? 2. Which of the following variables, or combinations of variables, is the best predictor of item difficulty in anaphoric nominal substitution? a. A change in the grammatical form of the antecedent. b. A discrepancy between the position of the substitute on one layer of a sentence and the position of its antecedent on another layer in the same (or a different) sentence. c. The distance between the substitute and its antecedent. d. The length of the construction replaced by the substitute.

The subjects for the study came from two populations. One sample was composed of juniors, seniors, and graduate students enrolled in a teacher certification course. The other sample consisted of college freshmen who had sought assistance in improving their reading skills. Altogether, 172 subjects were tested, 80 belonging to the first sample and 92 to the second.

The three reading scores, namely Total Reading, Reading Comprehension, and Vocabulary, were obtained by applying the Diagnostic Reading Tests: Upper Level, Survey Section. Total Substitution Scores were collected by administering the Substitution Test. Positive and significant relationships were found between Total Substitution scores and the three reading scores for both samples. The highest set of correlations was found when the two samples were combined for analysis. The correlation between Total Substitution and Total Reading was .77, that between Total Substitution and Reading Comprehension was .78, and that between Total Substitution and Vocabulary was .68. Thus, approximately 59% of the total variance on Total Reading as well as Reading Comprehension was accounted for by the readers' ability to reproduce the constructions replaced by the substitutes in the Substitution Test. Thus, an answer was found to the first theoretical question.

Using four item characteristics, namely Change, Discrepancy, Distance, and Length as independent variables, and Item Mean as the dependent variable, Length was found to be the best single predictor of item difficulty, yielding a correlation coefficient of -.44 across the samples. When the stepwise multiple regression procedure was employed, Length and Distance combined were the best predictor of item difficulty, accounting for approximately 36% of the total variance in item difficulty. Thus, an answer was also found to the second theoretical question.

The findings of this exploratory study seemed to point to the possibility that semantic considerations may be more crucial than grammatical relations to an understanding of discourse structure. If further research were to yield similar results, it would then be appropriate to hypothesize that reference rather than substitution is a factor in comprehension. While it may be premature to apply the findings of this study to reading instruction, the results do suggest their usefulness in terms of readability assessment and teaching in the content areas. There is evidence that anaphoric substitutes can be used as a diagnostic device to ascertain comprehension as well as to locate breakdowns in comprehension. Additional research is needed to further our understanding of the role anaphoric substitutions play in reading comprehension, in other languages as well as in English.

THE EFFECTS OF INFERENTIAL PROCESSING INDUCED BY INSERTED QUESTIONS ON PROSE RECALL Order No. 7813060

FRIEDMAN, Frank H., Ph.D. Purdue University, 1977. 130pp. Major Professor: John P. Rickards

The present investigation attempted to induce various levels of semantic processing by inserting appropriate postquestions into text.

The text was read by 210 college students enrolled in the introductory psychology course at Purdue University. The study was conducted as a 3x2x2 between subjects factorial with two separate control groups. The factors were: level of inserted question (verbatim, paraphrase, inference), presentation format (read-question-read, read-read-question), and review condition (cued, mental). One control group read the passage once at their own rate without the presence of inserted questions (Read Once Control). The other control group was equated for study time with the experimental groups (Read Twice Control).

Experimental subjects answered one multiple choice inserted question after each paragraph of text. Presentation format was manipulated such that half of the experimental subjects read a paragraph then answered an inserted question related to the paragraph and then reread the paragraph (read-question-read). The other half read a paragraph twice and then answered the related inserted question (read-read-question). The verbatim question required the readers to choose the alternative which was an exact duplicate of a sentence in the preceding paragraph. The paraphrase question required the readers to choose the alternative with the same meaning as a sentence in the preceding paragraph. Inference questions required the interaction of text information with one's existing knowledge in order to choose the correct alternative.

Subjects were tested after a twenty-four hour delay. For the ten minutes preceding the test, half of the experimental subjects and all of the control subjects were allowed to mentally review the instructional passage. The other half of the experimental subjects were given the correct answers to the inserted questions as retrieval cues to be used during the ten minute review. The dependent measure consisted of 48 completion items. Sixteen of the items referred to questioned material (target sentences). The others referred to incidental material. Test items were written at inference, paraphrase and verbatim cognitive levels.

The results indicated that on the total test performance, the inference question group was superior to the paraphrase question group which was superior to the verbatim question group. Only the read-question-read cued inference group exceeded the Read Twice Control although cued paraphrase and cued and noncued inference question groups exceeded the Read Once Control.

Cued review was found to be superior to mental review on total test performance. However, a more detailed analysis indicated that this difference was due to the superiority of the cued review group on test items related to questioned material. No difference existed on test items related to non-questioned material. Therefore, the hypothesized reconstructive effect of cues was not supported. Presentation format failed to reach significance in any analysis.

The results indicated that inference questions produced equal or better performance on all test item types when compared with paraphrase or verbatim questions. This included superior performance on one set of items requiring inferences from non-questioned material. Thus, inference questions apparently produced a set to process material by relating it to one's general knowledge.

When compared with the control groups, inference and paraphrase questions produced superior learning of questioned material. However, only the read-question-read cued inference group exceeded the Read Once Control on test items related to non-questioned material.

Practical implications of the study suggest the use of high level inserted postquestions by authors and teachers to facilitate comprehension.

THE EFFECT OF METHOD OF PRESENTATION AND DEGREE OF IMAGERY ON LEARNING RESPONSES TO PRINTED WORDS Order No. 7809308

JOHNSTON, Joan Bascle, Ed.D. University of New Orleans, 1977. 189pp.

Purpose of the Study

This study investigated the effect of method of presentation and degree of imagery on kindergarten children's ability to identify words. Pressure is felt by the educational community to be accountable for the achievement of children in school. Beginning reading approaches are many and varied and opinion is divided as to the most efficient techniques to assist students in developing a sight vocabulary and word recognition skills. The hypotheses stated were that there will be a statistically significant difference in the number of words identified correctly due to method of presentation and degree of imagery.

Procedures

Volunteer subjects were randomly selected and randomly assigned to the sixteen cells of the design. An analysis of covariance was utilized, the independent variables being the method of presentation (isolation, picture, context, and picture and context) and degree of imagery (high and low). Intelligence quotient (I.Q.) was the covariate and sex served as a blocking variable. Stimulus materials for the experimental treatments were developed by the investigator. The study was organized in two phases: 1) administration of the Peabody Picture Vocabulary Test (PPVT) for the I.Q. score, and 2) the experimental treatments.

Summary and Conclusions

The results of the study indicated statistically significant differences due to method of presentation and degree of imagery (0.001 and 0.01, respectively). The kindergarten subjects responded more positively to the isolation treatment with words of high imagery, and to the picture treatment with words of low imagery. More high imagery words were correctly identified than low imagery words. The weakest treatment was the combination of picture and context.

Further research was recommended to better define methods of treatment as they relate to the individual beginning reader, the applications of methods of treatment with current reading materials, the strengthening of the "word" concept, and extension of the stimulus materials. Implications for classroom practice were found in the verification of the value of sight vocabulary and a conscious use of the imagery factor in the instructional strategies.

DIRECTION AND ORGANIZATION AND ADOLESCENT LEARNING DISABLED STUDENTS' READING COMPREHENSION
Order No. 7814954

LINDSEY, Jimmy Doyle, Ph.D. University of Georgia, 1978. 107pp. Supervisor: Dr. Kathryn Blake

The purpose of this study was to investigate the effects of directions, text organization, and age level on the recall of goal-relevant and incidental information. The study also investigated the perception of text organization as a function of directions, text organization, and age level.

Forty-eight adolescent learning disabled students served as subjects (Ss). Ss represented two age levels: 13-6 to 16-11, $\bar{X}$ = 16-0 (A_1); and, 17-0 to 19-2, $\bar{X}$ = 17-3 (A_2).

Four instruments were used: directions (General versus Specific); texts (Nondispersed versus Dispersed); a multiple choice test; and, a questionnaire. General directions told students to read and learn all they could. Specific directions were learning goals that identified specific information to be learned. The nondispersed text had goal-relevant sentences consecutive with respect to the learning goals and goal units. The dispersed form of the same text had goal-relevant sentences dispersed within the text. The multiple choice test and the questionnaire were standard.

Ss were divided into eight treatment groups, n=6. Three way analyses of variance were used to process the goal-relevant and incidental data. Mann-Whitney U Tests for large samples were used to process the perception of text organization data.

Directions affected the recall of goal-relevant information. Specific direction groups had significantly higher goal-relevant comprehension. Directions did not affect the recall of incidental information or the perception of text organization.

Text organization did not affect the recall of goal-relevant or incidental information. It also did not affect the perception of text organization.

Age level did not affect the recall of goal-relevant or incidental information. It also did not affect the perception of text organization.

There were no significant interactions.

THE EFFECTS OF READING ABILITY AND MATERIAL DIFFICULTY ON STUDENTS' ABILITIES TO RECOGNIZE WORDS IN ISOLATION AND IN CONTEXT
Order No. 7809713

NEGIN, Gary Alan, Ph.D. University of Minnesota, 1977. 85pp.

On the basis of the Stanford Reading Achievement Tests 51 first grade students and 51 third grade students who read on a level equivalent to their grade placement were randomly assigned to one of three treatment conditions. In the list-list condition subjects twice read a list of easy words and twice read a list of hard words. In the list-story condition students read an easy list of words followed by an easy story in which the previous words were contained. Then the children followed the same procedure, but with hard materials. In the last condition pupils read an easy story and then a list of words taken from the story. The procedure was then repeated using hard materials.

Based on preliminary work with 17 students at each grade level it was determined that an equivalent easy task was to have first grade children read a primer story while third grade pupils read a third grade story. The hard task was defined as the reading of first grade materials for first grade children and seventh grade materials for third grade subjects. The stories used in the study were taken from the Standard Reading Inventory. These carefully graded stories were unfamiliar to the children.

The results showed that both grade levels performed similarly. The list-story condition produced results which were significantly greater than those from the list-list condition with the easy materials. However, no difference was found when these conditions were compared with the hard materials. An order effect was identified. Greater improvement in gain scores was found under the list-story condition than under the story-list condition. An interesting result showed no significant difference between the list-list and story-list conditions.

A second aspect of the study was to carefully scrutinize oral reading miscues to gain insights into the reading process. The data revealed that the graphic similarity of miscues to the printed stimuli was higher for third grade pupils than for first grade students. Also, as reading materials became more difficult, the substitutions of both groups showed greater graphic similarity to print. While third grade students provided more contextually inappropriate substitutions which were real words rather than nonsense words, both groups produced more real word than nonsense word substitutions. As material difficulty increased, the number of contextually inappropriate substitutions rose.

A COMPARISON OF MEMORY FOR VERBATIM AND INFERENTIAL INFORMATION IN PROSE AT TWO GRADE LEVELS
Order No. 7813951

PÉREZ, Ray Stephen, Ph.D. University of California, Los Angeles, 1978. 133pp. Chairman: Professor Merlin C. Wittrock

The major objective of the study is the investigation of the hypothesis that children's comprehension and memory skills for written language is determined, in part, by the processing strategies that children employ spontaneously to encode information into memory. Different levels of encoding were induced in children from two grade levels (fourth and sixth) by asking subjects to answer questions at three levels: (1) a verbatim or shallow level, where the child is asked to retain a particular bit of information; (2) a lexical inference level, where he or she is asked to comprehend the lexical message by performing elaborations beyond simple retention required by first level; and (3) a contextual inference or deepest level, where the child is asked to make conclusions or draw suppositions. Older children in this study were expected to outperform younger children in accuracy of recognition and make more "false recognitions." Six passages were presented to 169 fourth and sixth graders from two elementary schools in Southern California. At the conclusion of the reading of each passage, each subject (except controls) was instructed to answer three questions. Subjects only answered questions at one level.

Assessment of the memory trace was accomplished by the administering of a recognition test to the children, upon completion of an interpolated task. The type of information encoded in

each subject's memory was inferred from his or her accuracy scores and number of "false recognitions."

A two-way analysis of variance, 2 grade levels (fourth and sixth) x 4 treatments (3 experimental and 1 control), was performed. The dependent variables were the accuracy and number of "false recognitions" in the recognition of verbatim and inferential information.

The analyses of variance scores and "false recognitions" of inferences revealed a significant difference only between treatments and control subjects, ($p < 0.01$). The analyses of variance for accuracy scores of the recognition of information did not reveal a significant difference among the treatment but did reveal significant difference among grade levels ($p < 0.05$). The interaction between treatments and grade levels approached significance ($p < 0.06$). The results of the study were, however, complex. The age of the subjects answering questions that require simple inferences, and a decrement in accuracy for older subjects answering questions that required making complex inferences. Different questions induced different encoding operations within the two domains for verbatim and inferential information. In sum, data from this investigation suggest that children in fourth and sixth grades can be induced to make inferences to answer questions about prose passages they have read. Inferential operations can affect encoding and storage in memory.

These results suggest that the type of questions answered effects the comprehension of written language and may facilitate the use of mnemonic strategies flexible enough to be applied by the reader to new and different situations.

THE ROLE OF CULTURAL SCHEMATA IN NARRATIVE COMPREHENSION Order No. 7815844

RICE, Grace Elizabeth, Ph.D. University of California, Irvine, 1978. 299pp. Chairman: Professor Benjamin N. Colby

This study takes as its premise the basic assumption of cognitive anthropology that culture is a learned system for perceiving the world. The early ethnoscientific approaches to the study of cognition are seen as too static, however, being limited by their reliance on combination of attributes and components in producing emic descriptions of semantic domains. It is argued that a more dynamic view of cognition can be achieved by introducing Bartlett's (1932) concept of "schema" and by treating culture as an information processing system which operates by assimilating new information to a complex of learned schemata.

The American schema for stories is investigated in detail through experiments using American subjects, with the dual objective of exhibiting its internal organization and demonstrating the effect it produces on comprehension of various types of stories. Narrative in general, and the story schema in particular, is particularly amenable to study in this context because its components have temporal and hierarchical structure as well as pragmatic organization. A culturally sensitive version of constructivist models of comprehension is developed and updated versions of Bartlett's techniques are used. Together, these predict distortion or selective recall of foreign stories as a result of assimilation to American schemata.

Three separate experiments are reported. Tests 1 and 2 are designed to test the suitability and accuracy of the American story schema, which is initially developed as a synthesis of earlier work on the subject. Test 1 (thirty subjects) confirms the general form of the schema through analysis of subjects' completions of incomplete story candidates. Test 2 (sixty subjects) uses recall of incomplete story candidates to the same end. Test 3 (seventy subjects) addresses the cultural implications of the schema directly by comparing recall of stories of Eskimo and American construction. For all three experiments both quantitative and qualitative modes of analysis are used.

Results obtained have implications for at least three topic areas: the American story schema, the recall of foreign material, and the cultural aspects of comprehension processes. In general, the schema is shown to have both facilitative and stereotypical effects on recall. On the basis of the story schema it is possible to predict the patterns of several measures, including subjects' judgments of a passage's "story-ness" and understandability, the relative accuracy of recall, certain attributes of importations into recall, and the degree to which subjects will agree over time in what they recall of a given passage. In addition, subjects' recall of passages tends to be distorted so as to more closely approximate the schema in those cases where the story candidate was not so structured in its original form. The results showed that Eskimo stories are judged to be less storylike, inspire more structural changes in recall, and prompt more idiosyncratic recall than stories of American structure.

In short, the study provides strong evidence that comprehension of narrative is strongly influenced (stereotyped) by cultural schemata. Stereotyping to other cultural schemata in addition to the story schema is documented, indicating the density of the complex of cultural schemata which operate in narrative comprehension. It is suggested that further work in this area be directed toward specifying an assimilation model which is applicable to a wide range of these schemata.

THE EFFECT OF ORAL VERSUS WRITTEN PRESENTATION OF AN ADVANCE ORGANIZER ON RETENTION Order No. 7810979

SALMON, Robert Dreifus, Ph.D. The University of Florida, 1977. 60pp. Chairman: John M. Newell

This study attempted to evaluate the utility of the advance organizer preinstructional strategy using an oral mode of presentation. Ninety-six college sophomores and juniors were presented with various combinations of written and oral advance organizers and learning passages. They either read both passages or listened to both advance organizer and learning passages. Others read one and listened to the other. These different treatments were conducted in the same time span. There were two control groups who did not receive the advance organizer but either listened or read the learning passage. The treatments were conducted in a listening laboratory in individual carrels where the hearing subjects listened to a tape recording through earphones while others read their assigned material.

All subjects participated in a pretest at least one week in advance of engaging in a listening or reading session. They were posttested at least a week after treatment. The results were evaluated using test scores and length of time taken to perform on the tests.

The following hypotheses were examined in this study: 1) There will be no significant difference on posttest scores for subjects presented with an oral advance organizer when

compared with subjects presented with a written advance organizer. 2) There will be no significant difference on posttest scores for those subjects presented with an oral learning passage when compared with subjects presented with a written learning passage. 3) There will be no significant difference between length of time to complete posttest for subjects presented with an oral or a written advance organizer. 4) There will be no significant relationship between posttest scores and length of time to complete posttest.

The analysis of variance procedure indicated no significant differences between the means of the scores of the six treatments for the posttests. An additional analysis of variance indicated that those subjects who had received the oral learning passage reduced their time in taking the posttest significantly more than those taking the written learning passage when compared with pretest times.

The conclusions are that oral advance organizers or learning passages in conjunction with either written or oral learning passages provide no differentiation in learning or retention with verbally sophisticated subjects.

Future studies in this area should consider using younger and less sophisticated subjects. If subjects could be located who did not share the apparent verbal facility of the subjects in the present study, the differential effects of an oral or written presentation might become more obvious.

A COMPARISON OF THE EFFECTS OF QUESTIONS AND OF ADVANCE ORGANIZERS ON COMPREHENSION AND RETENTION OF PROSE MATERIALS Order No. 7814241

SYLVES, David P., Ed.D. State University of New York at Buffalo, 1977. 144pp.

To investigate the facilitative effect of questions and of advance organizers on learning from a reading passage, 249 twelfth grade students were randomly assigned to one of seven treatment groups. Multiple analysis of variance and covariance techniques (I.Q., high school average, and sex were the covariates) and principal component analyses revealed no significant differences on relevant or incidental learning on either immediate or delayed posttests.

In a related investigation a polynomial curve fitting analysis disclosed no differences in the effect of an advance organizer on the learning of bright students when compared to that of slower learners.

INTEGRATING INFORMATION FROM TEXT Order No. 7815250

WALKER, Carol Hinton, Ph.D. Arizona State University, 1978. 112pp.

This investigation was designed to answer two major questions: (a) does height of information in the content structure of text affect the probability of integrating the information, and (b) is it possible to differentiate between integration that occurs during acquisition and integration that takes place at retrieval. The results suggested that information high in the structure is more likely to be integrated than information low in the structure. These effects were observed in both instruction groups (learn and read) and in both presentation modes (segregated and integrated). In addition, premises occurring together in the text (integrated presentation) were found to promote faster correct decisions than premises occurring separately (segregated presentation). These verification time results were interpreted as evidence that structural integration (integration at acquisition) is more likely when premises occur together in an information source than when they occur separately.

MEMORY FOR PROSE: A PROCESSING ACTIVITIES APPROACH Order No. 7814711

ZIMMER, John William, Ph.D. The University of Nebraska - Lincoln, 1977. 91pp. Adviser: Roger H. Bruning

The present investigation, derived from preliminary efforts to develop a model of prose memory, explored the feasibility of extrapolating a processing activities analogue to prose. Prior research has documented the facilitative role of semantic level processing tasks on comprehension and retention of orally presented words and sentences. The present study generalized these findings to larger informational arrays. Additionally, the study was designed to assess whether or not a hierarchy of semantic processing activities exists. For example, are all semantic level processing tasks equally facilitative, or are some types of tasks more efficacious than others for enhancing retention of prose?

Two hundred and six undergraduate students participated in two studies (94 in Study 1; 112 in Study 2). Participants encountered specially designed prose passages describing characteristics of a ficticious nation. Each passage consisted of a superordinate (topic) sentence and three subordinate (specific) level statements. The design of both studies encompassed eight conditions, with variations in processing tasks comprising the major independent variable manipulation. Study 1 employed a recognition measure and Study 2 a cued recall test as dependent variables. Task groups differed as follows:

1) Surface Feature Analysis Task. Subjects estimated a randomly determined number of spelling errors in each passage.

2) Incidental Reading Control. Subjects specifically attended to lexical features, and responded to a mask questionnaire.

3) Intentional Reading Control. Subjects, informed in advance of the post-test, simply read the passages.

4) Superordinate Question Task. Subjects responded to text interspersed superordinate level questions.

5) Superordinate Statement Review Task. Subjects evaluated the suitability of superordinate statements, following subordinate level passages, as aides in memorizing subordinate information, and responded to a mask questionnaire.

6) Superordinate Organizer Task. Subjects evaluated superordinate statements preceding the subordinate passages as aids in memorizing subordinate information, and responded to a mask questionnaire.

7) Semantic Evaluation Task. Subjects rated, on a Likert scale the helpfulness of each superordinate statement in understanding the subordinate level paragraph.

8) Logical Evaluation Task. Subjects rated each superordinate statements as to whether it followed "logically" from each preceding subordinate level passage. Modifications were made to 50% of the superordinate statements for groups seven and eight which rendered them false relative to the subordinate passages.

Results of Study 1 (recognition test) indicated highly significant post-test differences across the eight conditions on total score, and subordinate/superordinate scores. Significant differences were indicated between Evaluation Task subjects and Surface Feature Task and Incidental Reading Control subjects. Differences in processing time obtained also supported a differential processing time hypothesis, with Evaluation Task subjects spending as much time as Surface Feature Task subjects and more than the other task condition subjects on time per passage.

Findings in Study 2 (cued recall test) showed patterns of significance similar to those obtained in Study 1 on total score, subordinate/superordinate scores and processing time scores across study conditions. Congruent with Study 1 outcomes, the Evaluation Task subjects scored higher than other processing task groups and Surface Feature Task subjects, supporting a processing levels interpretation of prose memory.

Results from both studies supported the hypothesis that qualitative differences in encoding operations have marked effects on performance, depending on the type of assessment measures used. Orienting activities which induce semantic level processing facilitate retention of prose. This hypothesis was sustained by a significant disparity in performance between tasks which centered attention on surface features and those requiring attention to meaning.

Relative to the levels within levels hypothesis, the Semantic and Logical Evaluation conditions did not differ significantly, although these conditions were more facilitative than Organizers, Review Statements and the Questioning Task. Findings, although not significant, were in the predicted direction and tentatively support the contention that a hierarchy of processing tasks does exist.

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